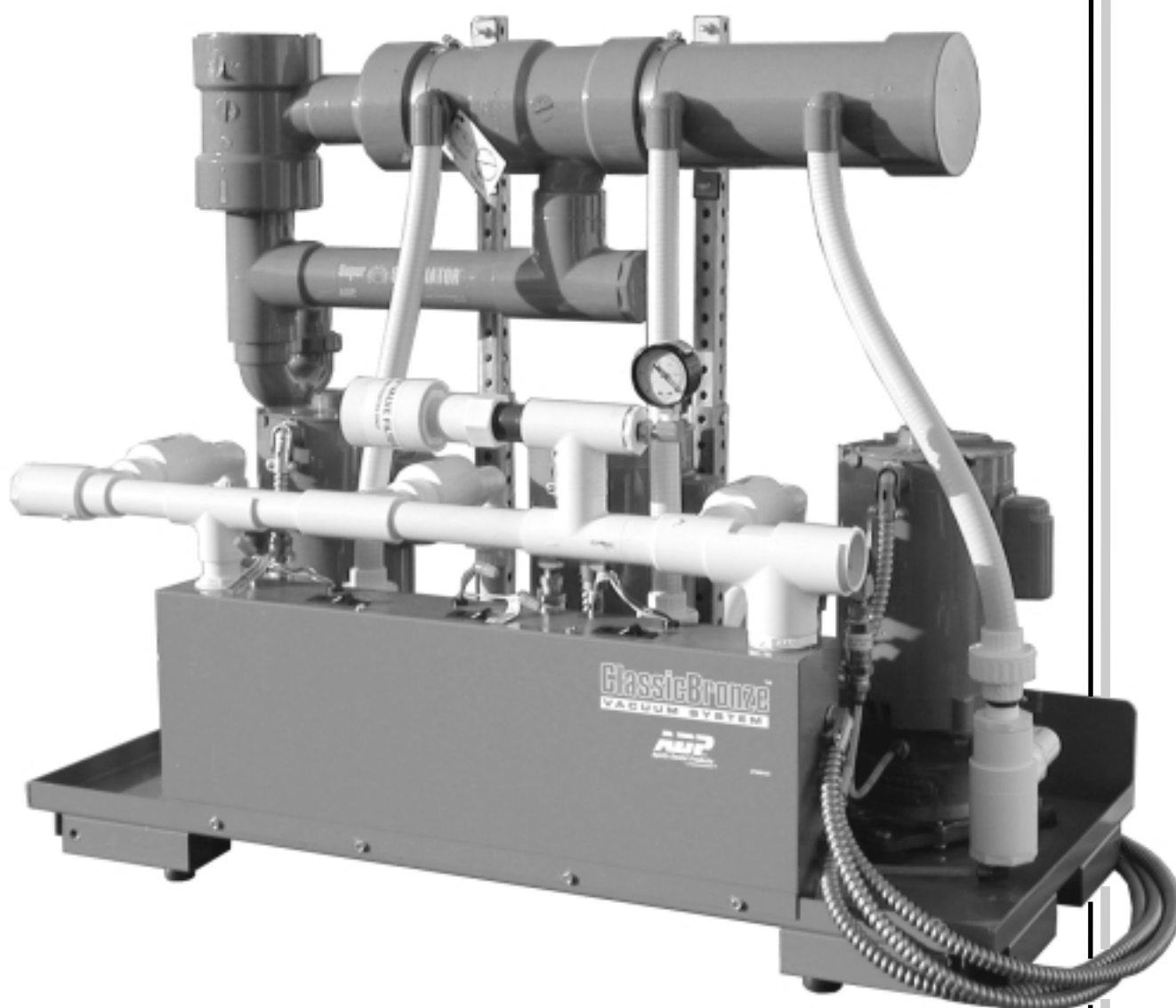




TROUBLE-SHOOTING GUIDE VACUUM COMPRESSOR



APOLLO DENTAL PRODUCTS, INC.

Introduction

This guide is designed to save you time and help you trouble-shoot ADP vacuum systems. You'll find step-by-step instructions, along with exploded parts diagrams to help you correctly identify the internal components and their related part numbers. If you need further assistance, please contact the ADP Technical Support Team. Please have the model number and serial number(s) available.

Technical Support

Phone: 800/233-4151 • 559/292-1444

Fax: 559/292-1555

Email: support@apollodental.com

Monday - Friday

7:00 a.m. - 5:00 p.m. (Pacific Time)



Apollo Dental Products, Inc.

245 W. Dakota Ave. • Clovis, California 93612

245 West Dakota Avenue

Clovis, California 93612

www.apollodental.com

For additional copies of this Trouble-Shooting Guide, you may order part number AMM45010.

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Product, Service and Availability

Apollo Dental Products is committed to being a leader in the dental industry. We are continually redefining service expectations in effort to build and maintain the best full service, full support relationships with our customers, the dealers. We are constantly striving to improve this relationship by offering new technologies, products and services.

Product Availability

We strive to maintain our position as the most reliable supplier of dental air and vacuum systems, merchandise and accessories in the dental industry.

- Expedite Orders / Quick Order Processing
- Distribution Centers - We can ship product from several regional Distribution Centers.
- Smart stocking of the most popular products.

Innovative Products

We manufacture a number of special equipment items that go above and beyond industry standard, including:

- Organizer™ - A complete compressor and vacuum package on wheels.
- Distillers - The only commercial grade water distillation system available on the market.
- Liquid-Ring Vacuums - UltraVac®, Gold Series™ and Classic Bronze™.
- Dry Vacuum Systems - DryVac™

Product Quality

Each product is carefully engineered to surpass performance expectations and include performance-enhancing features to help ensure that each application is a success.

- Parametric Modeling/CNC Machining
- Rigorous in-house and field testing

Service and Support

We offer a full range of responsive services and programs, providing the highest level of support for our customers.

- DentaCad
- Loaner Vacuum / Compressor
- World Wide Web
- Online Parts Lookup
- Rebuild / Express Repairs
- Representation & Experience in the field
- Specialty Products
- Product Flexibility
- Custom Design
- Technical Support and Customer Service

Global Presence

From California to Maine, and all across the USA - Apollo Dental Products has helped dealers place successful installations for dentists relying upon only the highest quality air and vacuum systems. In the International market we have customers in:

- Asia
- Australia
- China
- Eastern Europe
- Latin America
- Middle East
- Russia

A P O L L O D E N T A L P R O D U C T S , I N C .

CORPORATE

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Customer Service/Technical Support

Department hours are from 7:00 AM through 5:00 PM PST. ADP Customer Service/Technical Support is available for order entry and technical support by phone (800) 233-4151 or (559) 292-1444 or FAX (559) 292-1555, Monday through Friday. Fridays we are open until 4:00 PM PST and we are closed on major holidays.

Additional product documentation and specifications are available through our automated fax library at your request or at our website at <http://www.apollodental.com>. For extensive technical service, we refer you to the Apollo Engineering Team for problem solving.

Order Processing

All orders for equipment and accessories must be placed through an authorized dealer and processed by Apollo Dental Products, 245 West Dakota Avenue, Clovis, CA 93612, U.S.A.

- All equipment and accessories will be shipped C.O.D. unless your business has been issued a line of credit.
- Credit terms require invoices to be paid within 30 days of the invoice date. A 1.5% per month service charge applies on all unpaid balances in excess of 45 days.
- Orders are confirmed via FAX. You must provide a Telefax number.
- There will be a \$25.00 service charge on all returned checks.

Please include the following information with your order:

- | | | |
|-------------------------|-------------------------|----------------------------------|
| • Purchase Order Number | • Requested Ship Date | • Name of Person Placing Order |
| • Model Number | • Side Mark Information | • Method of Shipment and Address |

Shipping / Damage

- All shipments are F.O.B. Clovis, California or from one of the regional distribution sites.
- Products are shipped via UPS, FedEx or DHL. All products that exceed the UPS maximum size (150 lbs. or 103" length or 130" length/girth combined) will be shipped via common carrier. C.O.D. charges will be added to all C.O.D. shipments.
- At your request, we will ship via any air express carrier, at your expense.
- UPS DAMAGE: Accept shipment and file claim with UPS.
- TRUCK/AIR DAMAGE: Accept and note all damages clearly on the bill of lading. Apollo Dental Products is not responsible for concealed damage. The dealer is responsible for filing damage claim with the carrier. No credit will be issued on freight damaged replacement parts.

Product Return

Dealers may return authorized non-defective products within 90 days of the invoice date under the following conditions:

- **There is a 15% restocking charge on all non-defective returns.**
- All returned products must be in condition to resell. (unopened, undamaged, complete and in the original packaging)
- Your account must be current with no past due balances.
- Returns will be credited at the lower of the invoice price or current dealer price. Credit memos for use against future purchases will be issued for authorized returns.
- Only products currently offered will be accepted.

To expedite the return procedure:

You must obtain a Return Authorization Number (R.A.N.) from ADP Technical Support prior to returning the goods.

Please provide the following information:

- | | | | |
|----------------------------------|---------------------------------|---------------------|----------------------|
| • Company Name | • Invoice Date | • Serial Number | • New Item Requested |
| • Invoice Number or Order Number | • Product Name and Model Number | • Reason for Return | |
- Display the R.A.N. on the shipping label of all boxes containing returned goods.
 - Returned goods must be shipped freight prepaid in their original boxes and packing materials.

Warranty

All ADP products are thoroughly inspected and tested in accordance with rigid specifications and standards. Our products are guaranteed against any defective material and workmanship from the date of shipment; provided, that the installation, operation, and maintenance is done in accordance with ADP procedures as outlined in our Installation and Maintenance Guides. **Warranty cards must be returned to ADP within ten days of installation to effect warranty.** No other warranties or guarantees, expressed or implied are made.

ADP's obligation under the warranty is to provide parts for the repair or, at its option, to provide the replacement product (excluding labor). All special, incidental and/or consequential damages are excluded. We will not issue credit for product without first attempting to correct the problem in the field. Written notice of breach of warranty must be given to ADP within the warranty period. The warranty does not cover damage resulting from improper installation or maintenance, accident or misuse. The warranty does not cover damage resulting from the use of cleaning, disinfecting or sterilizing chemicals and processes. Failure to follow instructions provided in ADP's Installation and Maintenance Guides may void the warranty.

* All warranty repairs must be repaired by authorized Dealers and/or service dealers only - no exceptions.

* Labor charges are NOT included.

Warranty Periods from Date of Shipment

Following is the warranty policy for various products and replacement parts.

Lubricated Air Compressors	2 Years
Scroll Type Oil-Less Air Compressor (Revolution™ Model)	2 Years
Piston Type Oil-Less Compressors	3 Years
Combi™ and Organizer™ Compressor/Vacuum System	2 Years*
Classic Bronze™ Vacuum	2 Years
Gold Series™ Vacuum (Stainless Steel & Tin Bronze Components Only Excluding Shaft)	3 Years**
UltraVac™ Vacuum (Stainless Steel Components Only Excluding Shaft)	5 Years**
Dry Vacuum (DryVac™ and Centrifugal Models)	2 Years
Refrigerated Air Dryer	2 Years***
Replacement Parts and Accessories	90 Days****
Rebuild Program (Repair of non-warranty vacuums)	6 Months****

* Combi and Organizer Systems carry a 2 year warranty period on all electrical components. Warranty periods for the compressor heads and vacuum pumps reflect the standard warranty for each type.

** All other vacuum parts/components such as motors, seals, electrical assemblies, etc. are warranted for 2 years.

*** The manufacturer provides warranty service in the field. The customer must contact Apollo Dental Products for an authorized repair facility in their area. Do not send these items back.

**** Replacement parts are covered under the remaining warranty of the unit they are replacing, or 90 days from the date of shipment, whichever is the longest. Repairs are 90 days or remainder of warranty period.

- Warranty period starts from the installation date indicated on the warranty card. If warranty card is not returned, warranty period will start on the day the item is shipped.
- Shipping damage or damage caused by equipment handlers and installers is not covered.

No other warranties or guarantees, expressed or implied are made.

General Notes:

- All prices are based on U.S. currency.
- All prices and specifications are subject to change without notice.
- All weights reflected are shipping weights.

Listings

- Underwriter's Laboratories (UL) (cUL) File Number MH13627
- U.S. Food and Drug Administration (FDA) File Number 29379227

Vacuum Rebuild Program



- **Fast turn-around time:**

**3 days on Apollo Dental
Products models**

**5 days on other
manufacturer models**
- **6 Month Warranty**
- **Free transport cases provided**

Standard vacuum rebuilds include replacement and/or repair of:

- *Vacuum Relief Valve • Electrical Components • Strainer • Intake Filter •*
- *Vacuum Gauge • Bearings • Vacuum Breaker • Seals •*

Apollo Dental Products, Inc.
Innovative Products. Simple Solutions.

245 West Dakota Avenue • Clovis, CA 93612

Phone: 800/233-4151 (US & Canada)
559/292-1444 (International Customers)

Fax: 559/292-1555

www.apollodental.com

**For more information,
call our Rebuild Department**

800 233-4151

**or e-mail:
*rebuild@apollodental.com***

Liquid-Ring Vacuum Differences

Apollo Dental Products vacuum pumps are consistently providing superior evacuation because of their innovative design and the attention given to performance enhancing details.

The Proof Is In The Design

Thicker Housing Walls:

Due to the increase in cavity preparation techniques that involve air abrasion, liquid-ring pumps are experiencing accelerated wear rates. Our new housings feature increased wall thickness to provide more strength in the areas most susceptible to wear from air abrasion.



Impeller Blade:

Impeller blade design has long been one of critical factors in improving vacuum output. We've reduced blade thickness and increased chamber size to maximize vacuum output by up to 25% over the competition. Our modified blades increase life expectancy and provide unmatched performance advantages over traditional vacuum pumps.



Porting Design:

We've redesigned the flow path of liquids and air through the pump for smoother flow and reduction of possible debris build-up. The enhanced porting helps increase pump life and improve pump efficiency.



Single Vacuum Specification Table

Vacuum Model	Max. Number Of Users	Width	Depth	Height	Weight (Shipping)	Total Horsepower	Voltage	Amps	Hertz	Breaker Size	Total Water* Consumption (GPM)	Connection (PVC Slip)	Vacuum Drain Connection (PVC Slip)	Fresh Water Connection (NPT)	Dispos-A-Bowl Replacement
AVG10S / AVU10S	3	13 in.	11 in.	15 in.	69 lb.	1	115/208-230	16.2/8.1	60	30/20	1/2	3/4 in.	3/4 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVG10SF / AVU10SF	3	33 cm.	28 cm.	38 cm.	31 kg.	1	220	8.1	50	20	1/2	19 mm.	19 mm.	3/8 in. BSPT-F	AVA60001
AVB10S	2	13 in.	11 in.	15 in.	70 lb.	1	115/208-230	16.2/8.1	60	30/20	1/2	3/4 in.	3/4 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVB10SE	2	13 in.	11 in.	15 in.	66 lb.	1	115/208-230	16.2/8.1	60	30/20	1/2	3/4 in.	3/4 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVB10SF	2	33 cm.	28 cm.	38 cm.	32 kg.	1	220	8.1	50	20	1/2	19 mm.	19 mm.	3/8 in. BSPT-F	AVA60001
AVB10SFE	2	33 cm.	28 cm.	38 cm.	30 kg.	1	220	8.1	50	20	1/2	19 mm.	19 mm.	3/8 in. BSPT-F	AVA60001
AVG15S / AVU15S	4	13 in.	11 in.	17 in.	74 lb.	1 1/2	115/208-230	22/11	60	40/20	1/2	3/4 in.	3/4 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVG15SF / AVU15SF	4	33 cm.	28 cm.	43 cm.	34 kg.	1 1/2	220	11.0	50	20	1/2	19 mm.	19 mm.	3/8 in. BSPT-F	AVA60001
AVB15S	3	13 in.	11 in.	17 in.	75 lb.	1 1/2	115/208-230	22/11	60	40/20	1/2	3/4 in.	3/4 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVB15SE	3	13 in.	11 in.	17 in.	71 lb.	1 1/2	115/208-230	22/11	60	40/20	1/2	3/4 in.	3/4 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVB15SF	3	33 cm.	28 cm.	43 cm.	34 kg.	1 1/2	220	11.0	50	20	1/2	19 mm.	19 mm.	3/8 in. BSPT-F	AVA60001
AVB15SFE	3	33 cm.	28 cm.	43 cm.	32 kg.	1 1/2	220	11.0	50	20	1/2	19 mm.	19 mm.	3/8 in. BSPT-F	AVA60001
AVB20S	4	13 in.	11 in.	18 in.	83 lb.	2	208-230	12.0	60	20	1/2	3/4 in.	3/4 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVB20SF	4	33 cm.	28 cm.	46 cm.	38 kg.	2	220	11.0	50	20	1/2	19 mm.	19 mm.	3/8 in. BSPT-F	AVA60001
AVG20S / AVU20S	5	13 in.	11 in.	18 in.	85 lb.	2	208-230	12.0	60	20	1/2	1 in.	3/4 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVG20SF / AVU20SF	5	33 cm.	28 cm.	46 cm.	39 kg.	2	220	12.0	50	20	1/2	25 mm.	19 mm.	3/8 in. BSPT-F	AVA60011
AVG30S / AVU30S	7	13 in.	11 in.	20 in.	89 lb.	3	208-230	14	60	30	1/2	1 in.	3/4 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVG30SF / AVU30SF	7	33 cm.	28 cm.	51 cm.	40 kg.	3	220	14	50	30	1/2	25 mm.	19 mm.	3/8 in. BSPT-F	AVA60011

Options:

Most models can be ordered with recycler and/or exhaust separator, simply add suffix(es) “R” and “X”. *Recycler models consume .19 GPM of water.

Models suffixed with “R” denotes Recycler.

Models suffixed with “X” denotes Exhaust Separator.

Example: Vacuum model **AVU10S** with recycler and separator will read as **AVU10SRX**.

Notes:

Vacuum Dimensions do not include wall mounted air/water separator. **A dedicated electrical circuit** with circuit breaker **must be provided** for each vacuum pump. Ambient temperature must be within the range of 40 degrees Fahrenheit minimum (4°C) to 100 degrees Fahrenheit maximum (38°C).

“AVU” is UltraVac®

“AVB” is Classic Bronze™

“AVG” is Gold Series™

“F” denotes 50Hz systems



For optimum performance, use the
New StayClean™ Product Line
Exclusively by Apollo Dental Products

Twin Vacuum Specification Table

Vacuum Model	Max. Number Of Users	Width	Depth	Height	Weight (Shipping)	Total Horsepower	Voltage	Amps (Per Pump)	Hertz	Breaker Size (One Per Pump)	Total Water* Consumption (GPM)	Vacuum Inlet Connection (PVC Slip)	Vacuum Drain Connection (PVC Slip)	Exhaust Separator Vent Link	Fresh Water Connection (NPT)	Dispos-A-Bowl Replacement 1 Per Twin System
AVB10TN	5	26 in.	18 in.	20 in.	191 lb.	2	115/208-230	16.1/8.1	60	30/20	1.0	1 in.	3/4 in.	N/A	1/2, 1/4 in. or 3/8 in.	Tube
AVB10TNF	5	66 cm.	46 cm.	51 cm.	87 kg.	2	220	7.9	50	20	1.0	25.4 mm.	19 mm.	N/A	3/8 in. BSPT-F	AVA60011
AVB10TNFX	5	66 cm.	46 cm.	76 cm.	91 kg.	2	220	7.9	50	20	1.0	25.4 mm.	19 mm.	50.8 mm	3/8 in. BSPT-F	AVA60011
AVB10TNX	5	26 in.	18 in.	30 in.	200 lb.	2	115/208-230	16.1/8.1	60	30/20	1.0	1 in.	3/4 in.	2 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVG10TNFX / AVU10TNFX	6	66 cm.	46 cm.	76 cm.	90 kg.	2	220	7.9	50	20	1.0	25.4 mm.	19 mm.	50.8 mm	3/8 in. BSPT-F	AVA60011
AVG10TNX / AVU10TNX	6	26 in.	18 in.	30 in.	199 lb.	2	115/208-230	16.1/8.1	60	30/20	1.0	1 in.	3/4 in.	2 in.	1/2, 1/4 in. or 3/8 in.	Tube
AVB15TN	6	26 in.	18 in.	20 in.	203 lb.	3	208-230	11	60	20	1.0	1 in.	3/4 in.	N/A	1/2, 1/4 in. or 3/8 in.	Tube
AVB15TNF	6	66 cm.	46 cm.	51 cm.	92 kg.	3	220	10.6	50	20	1.0	25.4 mm.	19 mm.	N/A	3/8 in. BSPT-F	AVA60011
AVB15TNFX	6	66 cm.	46 cm.	76 cm.	96 kg.	3	220	10.6	50	20	1.0	25.4 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60011
AVB15TNX	6	26 in.	18 in.	30 in.	212 lb.	3	208-230	11	60	20	1.0	1 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in.	Tube
AVG15TNFX / AVU15TNFX	7	66 cm.	46 cm.	76 cm.	93 kg.	3	220	10.6	50	20	1.0	25.4 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60011
AVG15TNX / AVU15TNX	7	26 in.	18 in.	30 in.	204 lb.	3	208-230	11	60	20	1.0	1 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in.	Tube
AVB20TN	7	26 in.	18 in.	22 in.	217 lb.	4	208-230	13.4	60	20	1.0	1 in.	3/4 in.	N/A	1/2, 1/4 in. or 3/8 in.	Tube
AVB20TNF	7	66 cm.	46 cm.	56 cm.	98 kg.	4	220	13.4	50	20	1.0	25.4 mm.	19 mm.	N/A	3/8 in. BSPT-F	AVA60011
AVB20TNFX	7	66 cm.	46 cm.	81 cm.	103 kg.	4	220	13.4	50	20	1.0	25.4 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60011
AVB20TNX	7	26 in.	18 in.	32 in.	226 lb.	4	208-230	13.4	60	20	1.0	1 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in.	Tube
AVG20TNFX / AVU20TNFX	10	66 cm.	46 cm.	81 cm.	104 kg.	4	220	13.4	50	20	1.0	32 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60021
AVG20TNX / AVU20TNX	10	26 in.	18 in.	32 in.	229 lb.	4	208-230	13.4	60	20	1.0	1 1/4 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in.	Tube
AVG30TNFX / AVU30TNFX	12	66 cm.	46 cm.	81 cm.	108 kg.	6	220	14	50	30	1.0	32 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60021
AVG30TNX / AVU30TNX	12	26 in.	18 in.	32 in.	237 lb.	6	208-230	14	60	30	1.0	1 1/4 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in.	Tube

Options:

All models are equipped with separators, except “AVB10TN”, “AVB15TN” and “AVB20TN” models. To order with a water recycler*, simply replace “X” with “R”.

For models AVB10TN, AVB15TN and AVB20TN, single pump operation not recommended.

*Recycler models consume .19 GPM of water per pump. (.38 GPM total per twin system).

Example: Vacuum model AVU10TNX with recycler will be read as AVU10TNR.

Notes:

A **dedicated electrical circuit** with circuit breaker **must be provided for each** vacuum pump and both are to run at all times. Ambient temperature must be within the range of 40 degrees Fahrenheit minimum (4°C) to 100 degrees Fahrenheit maximum (38°C).

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“AVB” is Classic Bronze™

“AVG” is Gold Series™



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Triple Vacuum Specification Table

Vacuum Model	Max. Number Of Users	Width	Depth	Height	Weight (Shipping)	Total Horsepower	Voltage	Amps (Per Pump)	Hertz	Breaker Size (One Per Pump)	Total Water* Consumption (GPM)	Vacuum Inlet Connection (PVC Slip)	Vacuum Drain Connection (PVC Slip)	Exhaust Separator Vent Link	Fresh Water Connection (NPT)	Dispos-A-Bowl Replacement 3 Needed Per System
AVG10RFX / AVU10RFX	8	99 cm.	46 cm.	41 cm.	116 kg.	3	220	7.9	50	20	1.5	32 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60001
AVG10RX / AVU10RX	8	39 in.	18 in.	16 in.	255 lb.	3	208-230	8.1	60	20	1.5	1 1/4 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in. Tube	AVA60001
AVB10RFX	7	99 cm.	46 cm.	41 cm.	180 kg.	3	220	7.9	50	20	1.5	32 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60001
AVB10RX	7	39 in.	18 in.	16 in.	261 lb.	3	208-230	8.1	60	20	1.5	1 1/4 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in. Tube	AVA60001
AVG15RFX / AVU15RFX	11	99 cm.	46 cm.	46 cm.	124 kg.	4 1/2	220	10.6	50	20	1.5	32 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60001
AVG15RX / AVU15RX	11	39 in.	18 in.	18 in.	273 lb.	4 1/2	208-230	11	60	20	1.5	1 1/4 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in. Tube	AVA60001
AVB15RFX	10	99 cm.	46 cm.	46 cm.	125 kg.	4 1/2	220	10.6	50	20	1.5	32 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60001
AVB15RX	10	39 in.	18 in.	18 in.	276 lb.	4 1/2	208-230	11	60	20	1.5	1 1/4 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in. Tube	AVA60001
AVB20RFX	12	102 cm.	46 cm.	53 cm.	137 kg.	6	220	13.4	50	20	1.5	32 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60001
AVB20RX	12	40 in.	18 in.	19 in.	303 lb.	6	208-230	13.4	60	20	1.5	1 1/4 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in. Tube	AVA60001
AVG20RFX / AVU20RFX	14	102 cm.	46 cm.	48 cm.	139 kg.	6	220	13.4	50	20	1.5	38 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60011
AVG20RX / AVU20RX	14	40 in.	18 in.	19 in.	306 lb.	6	208-230	13.4	60	20	1.5	1 1/2 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in. Tube	AVA60011
AVG30RFX / AVU30RFX	16	102 cm.	46 cm.	53 cm.	150 kg.	9	220	14	50	30	1.5	38 mm.	19 mm.	2 in.	3/8 in. BSPT-F	AVA60011
AVG30RX / AVU30RX	16	40 in.	18 in.	21 in.	330 lb.	9	208-230	14	60	30	1.5	1 1/2 in.	3/4 in.	50.8 mm	1/2, 1/4 in. or 3/8 in. Tube	AVA60011

Options:

All models are equipped with separators. To order with a water recycler*, simply replace "X" with "R".

*Recycler models consume .19 GPM of water per pump. (.57 GPM total per triple system).

Example: Vacuum model **AVU10RX** with recycler will be read as **AVU10RR**.

Notes: Vacuum Dimensions do not include wall mounted air/water separator.

A **dedicated electrical circuit** with circuit breaker **must be provided** for **each** vacuum pump. Ambient temperature must be within the range of 40 degrees Fahrenheit minimum (4°C) to 100 degrees Fahrenheit maximum (38°C).

"AVU" is UltraVac®

"AVB" is Classic Bronze™

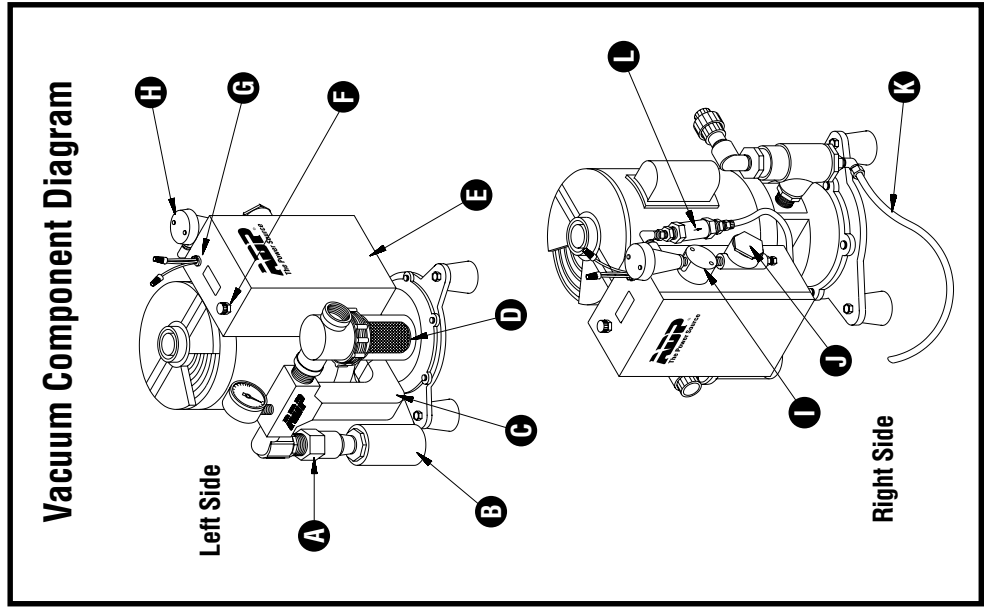
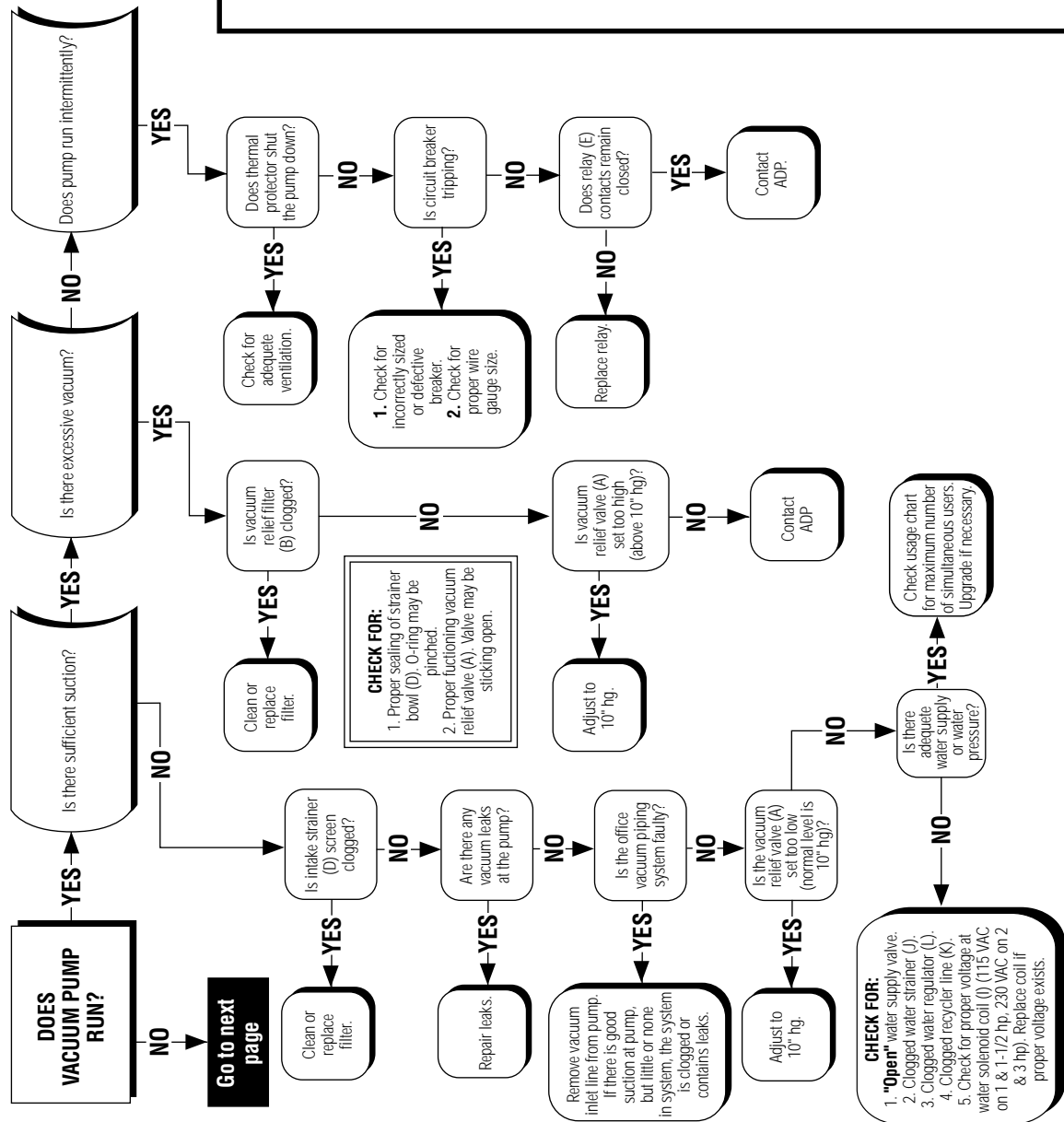
"AVG" is Gold Series™

"F" denotes 50Hz systems

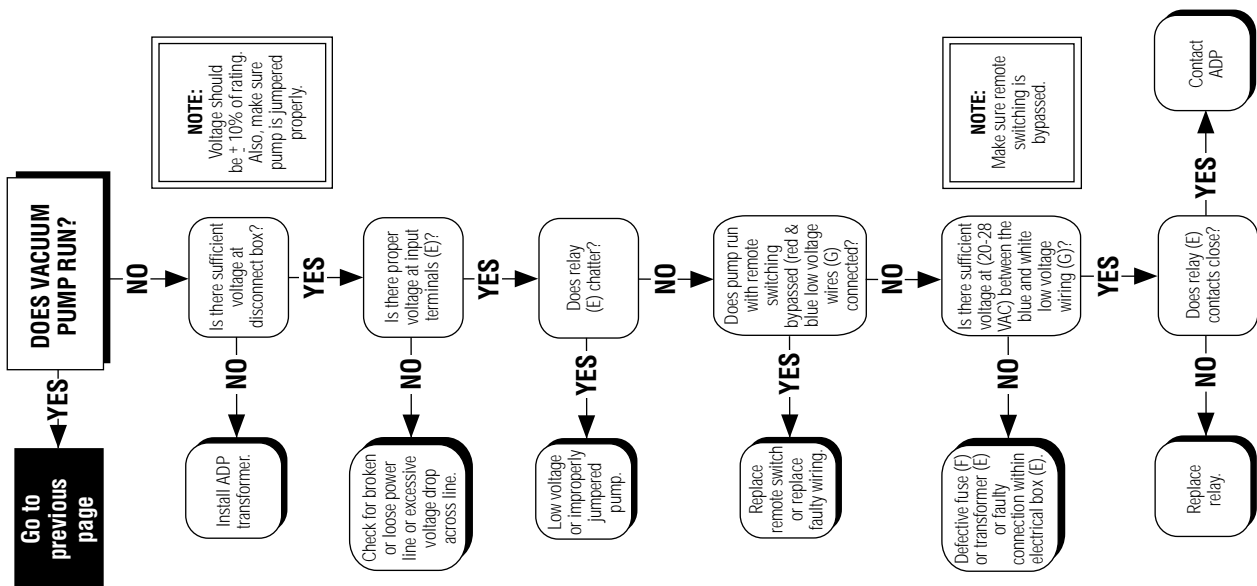


For optimum performance, use the
New StayClean™ Product Line
Exclusively by Apollo Dental Products

Trouble-Shooting Chart Single Vacuum

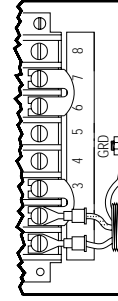
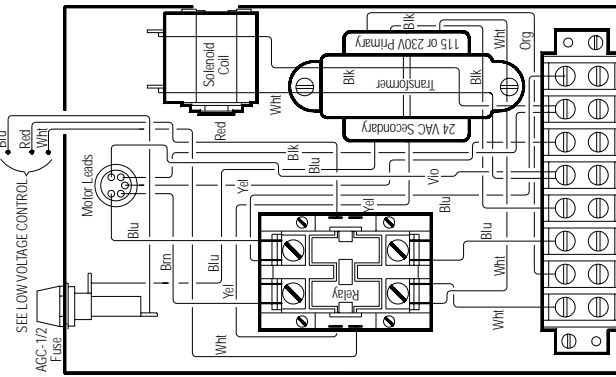


Trouble-Shooting Chart Single Vacuum



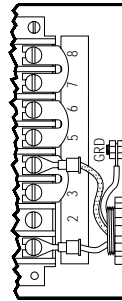
Vacuum Wiring Diagram

1 & 1 1/2 HP Platform Dual Voltage



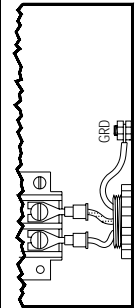
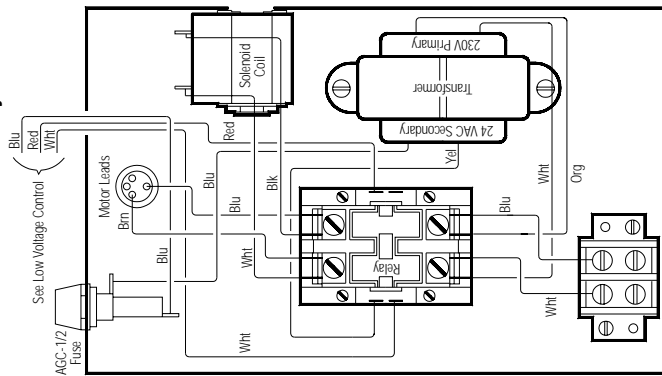
(Factory Setting)

208-230 Volt supply to terminals 1 and 2
Install Jumper from terminals:
2 to 3, 6 to 7



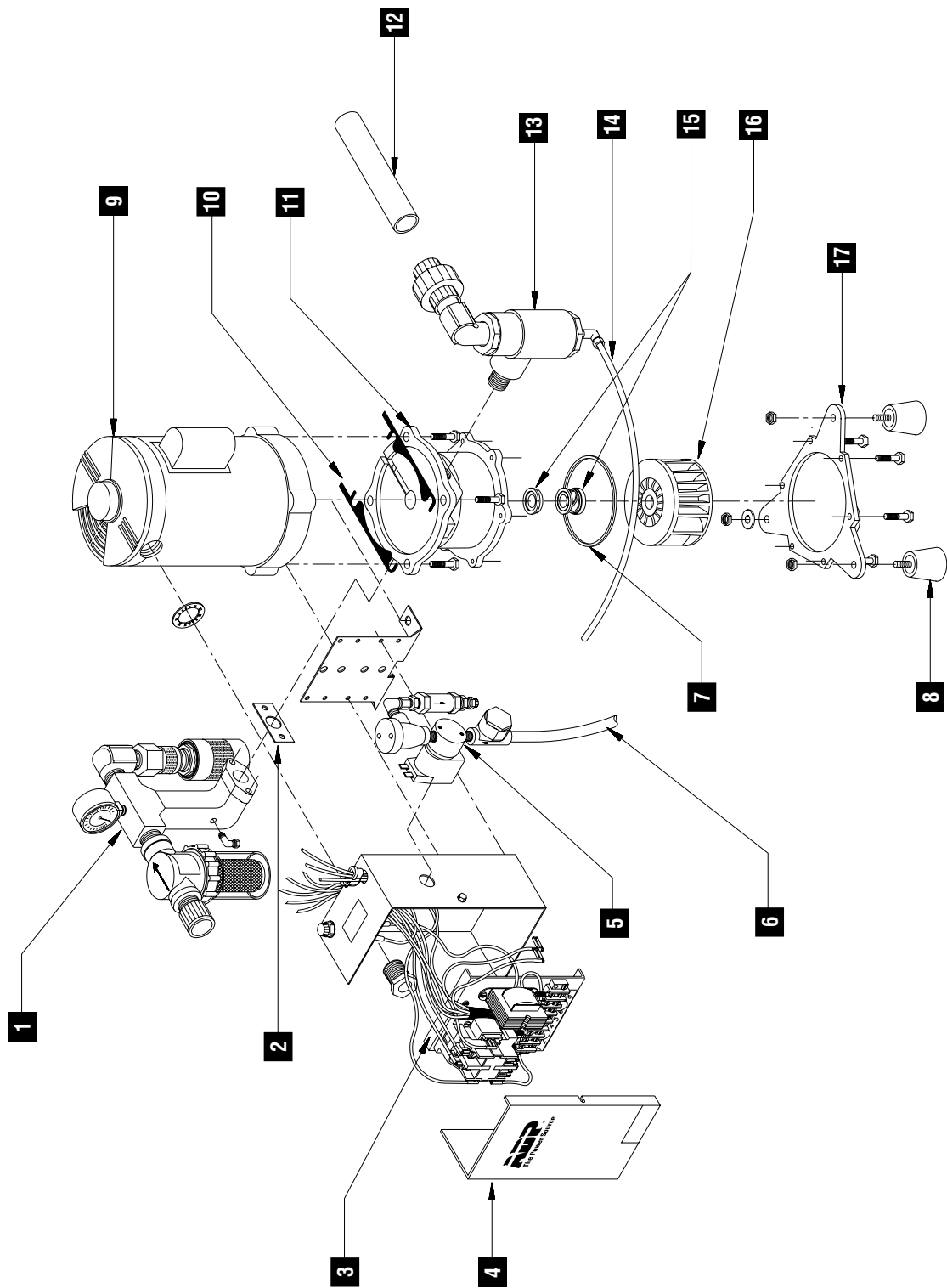
115 Volt supply to terminals 1 and 4
Install Jumper from terminals:
3 to 4, 5 to 6, 7 to 8

2 & 3 HP Platform 208-230 Volt Only



208-230 Volt supply to terminals

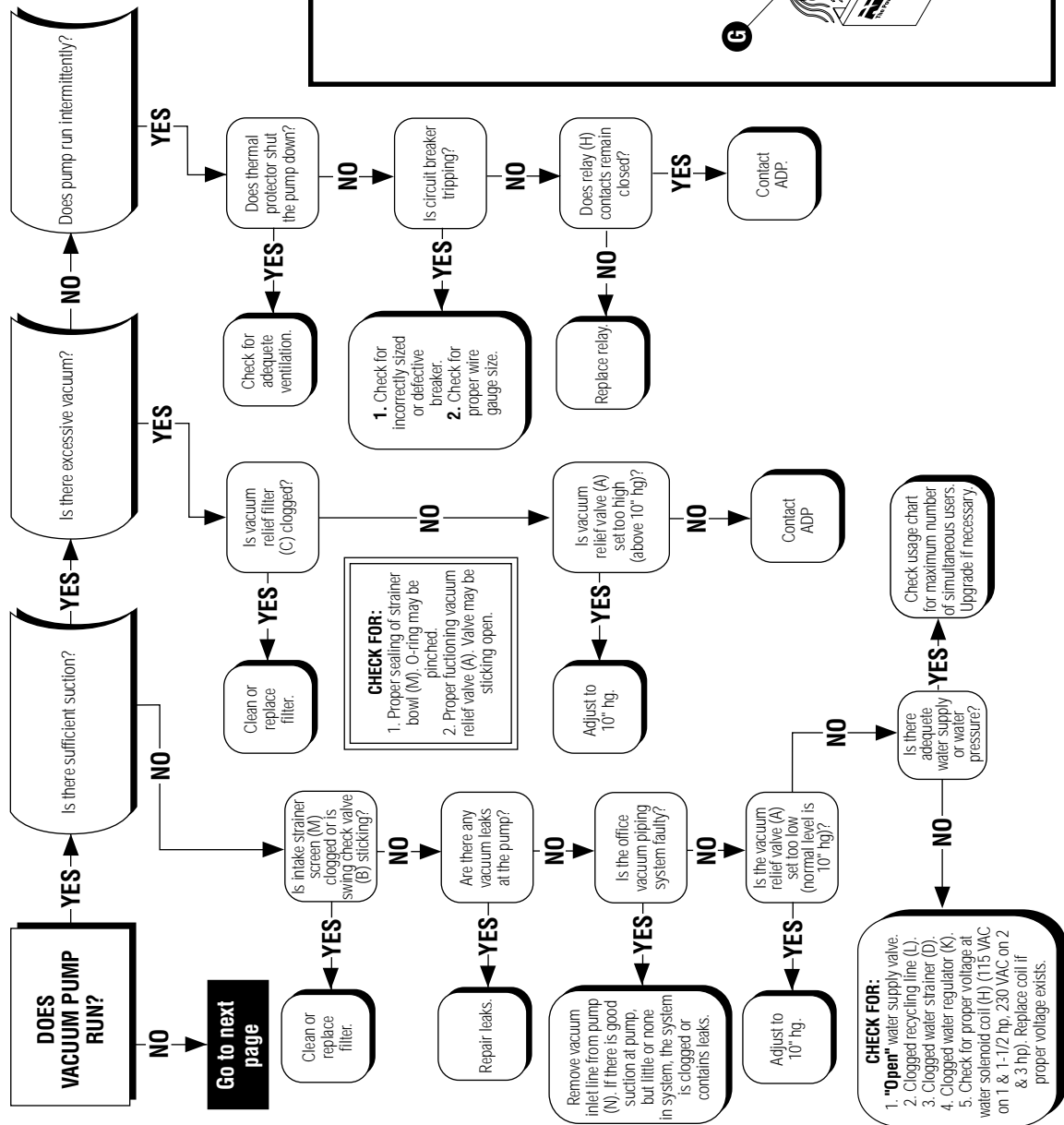
Single Vacuum Model



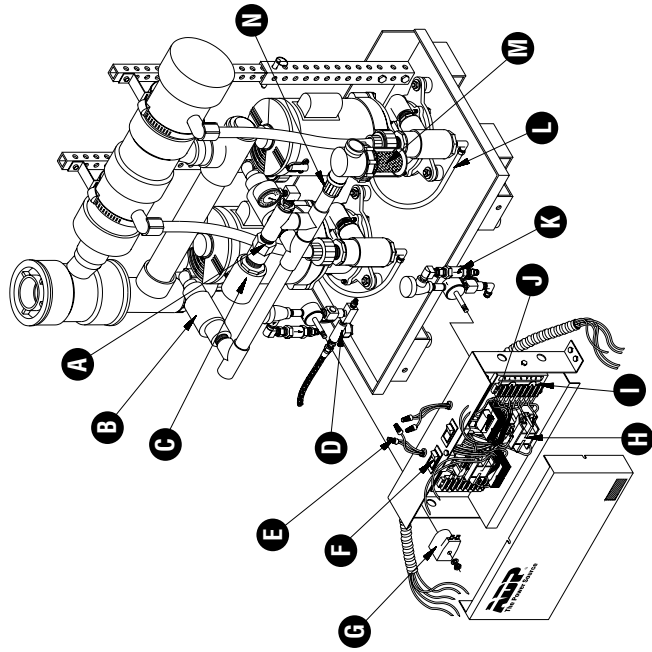
Single Vacuum Model

Item	Description	Qty.	AVU10SR	AVU15SR	AVU20SR	AVU30SR	AVG10SR	AVG15SR	AVG20SR	AVG30SR	AVB10SR	AVB15SR	AVB20SR
1	Assembly, Intake Manifold	1	AVP95815	AVP95815	AVP95820	AVP95820	AVP95817	AVP95817	AVP95822	AVP95822	AVP95810	AVP95810	AVP95810
1a	Strainer, Complete	1	PVC50705	PVC50705	PVC50706	PVC50706	PVC50705	PVC50705	PVC50706	PVC50706	PVC50705	PVC50705	PVC50705
1b	O-Ring, Strainer Bowl	1	MRP70935	MRP70935	MRP70936	MRP70936	MRP70935	MRP70935	MRP70936	MRP70936	MRP70935	MRP70935	MRP70935
1c	Dispos-A-Bowl Replacement	1	AVA60001	AVA60001	AVA60011	AVA60011	AVA60001	AVA60001	AVA60011	AVA60011	AVA60001	AVA60001	AVA60001
1d	Gauge, 1-30" Hg	1	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415
1e	Manifold	1	CVC80535	CVC80535	CVC80535	CVC80535	CVC80750	CVC80750	CVC80750	CVC80750	CVC80725	CVC80725	CVC80725
1f	Valve, Vacuum Relief	1	PVW85980	PVW85980	PVW85981	PVW85981	PVW85980	PVW85980	PVW85981	PVW85981	PVW85980	PVW85980	PVW85980
1g	Filter, Vacuum Relief	1	SVA95818	SVA95818	SVA95819	SVA95819	SVA95818	SVA95818	SVA95819	SVA95819	SVA95818	SVA95818	SVA95818
2	Gasket, Intake	1	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167
3	Assembly, Electrical	1	SVA95830	SVA95830	SVA95835	SVA95835	SVA95830	SVA95830	SVA95835	SVA95835	SVA95830	SVA95830	SVA95835
3a	Block, Terminal	1	ECC10250	ECC10250	ECC10251	ECC10251	ECC10250	ECC10250	ECC10251	ECC10251	ECC10250	ECC10250	ECC10251
3b	Jumper, 2 Terminal	3	ECC10225	ECC10225	---	---	ECC10225	ECC10225	---	---	ECC10225	ECC10225	---
3c	Holder, Fuse	1	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935
3d	Fuse, 1/2 Amp	1	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930
3e	Transformer, 24 V	1	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500
3f	Relay, 24 V	1	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460
4	Cover, Electrical Box	1	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561
5	Assembly, Water Solenoid	1	SVA95821	SVA95821	SVA95820	SVA95820	SVA95821	SVA95821	SVA95821	SVA95821	SVA95821	SVA95821	SVA95820
5a	Strainer, 1/4"	1	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960
5b	Solenoid, 1/4" w/Coil	1	PVW10470	PVW10470	PVW10472	PVW10472	PVW10470	PVW10470	PVW10472	PVW10472	PVW10470	PVW10470	PVW10472
5c	Coil, Solenoid	1	ECO10102	ECO10102	ECO10104	ECO10104	ECO10102	ECO10102	ECO10104	ECO10104	ECO10102	ECO10102	ECO10104
5d	Valve, Anti-Siphon	1	PVW50595	PVW50595	PVW50595	PVW50595	PVW50595	PVW50595	PVW50595	PVW50595	PVW50595	PVW50595	PVW50595
5e	Valve, Flow Regulator .19 GPM	1	PVW50505	PVW50505	PVW50505	PVW50505	PVW50505	PVW50505	PVW50505	PVW50505	PVW50505	PVW50505	PVW50505
6	Hose, 1/4" X8" Water	1	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100
7	O-Ring, Baseplate	1	MRP70955	MRP70955	MRP70957	MRP70957	MRP70955	MRP70955	MRP70957	MRP70957	MRP70955	MRP70955	MRP70955
8	Mount, Rubber	3	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910
9	Motor, Vacuum	1	HFM30905	HFM30910	HFM30911	HFM30912	HFM30905	HFM30910	HFM30911	HFM30912	HFM30905	HFM30910	HFM30911
10	Housing, Shim .005" Vacuum	2	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155
11	Housing, Pump	1	CVC80500	CVC80500	CVC80505	CVC80505	CVC80730	CVC80730	CVC80740	CVC80740	CVC80705	CVC80705	CVC80705
12	Hose, PVC Flex 3/4"	3 ft.	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460
13	Recycler, Simple Solution™	1	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500
14	Tubing, PolyFlo 1/4"	1.58 Ft.	PC180610	PC180610	PC180610	PC180610	PC180610	PC180610	PC180610	PC180610	PC180610	PC180610	PC180610
15	Assembly, Shaft Seal	1	SVA95845	SVA95845	SVA95847	SVA95847	SVA95845	SVA95845	SVA95847	SVA95847	SVA95845	SVA95845	SVA95847
16	Impeller	1	CVC80591	CVC80596	CVC80597	CVC80598	CVC80591	CVC80596	CVC80597	CVC80598	CVC80590	CVC80595	CVC80594
17	Baseplate	1	CVC80520	CVC80520	CVC80525	CVC80525	CVC80735	CVC80735	CVC80745	CVC80745	CVC80710	CVC80710	CVC80585

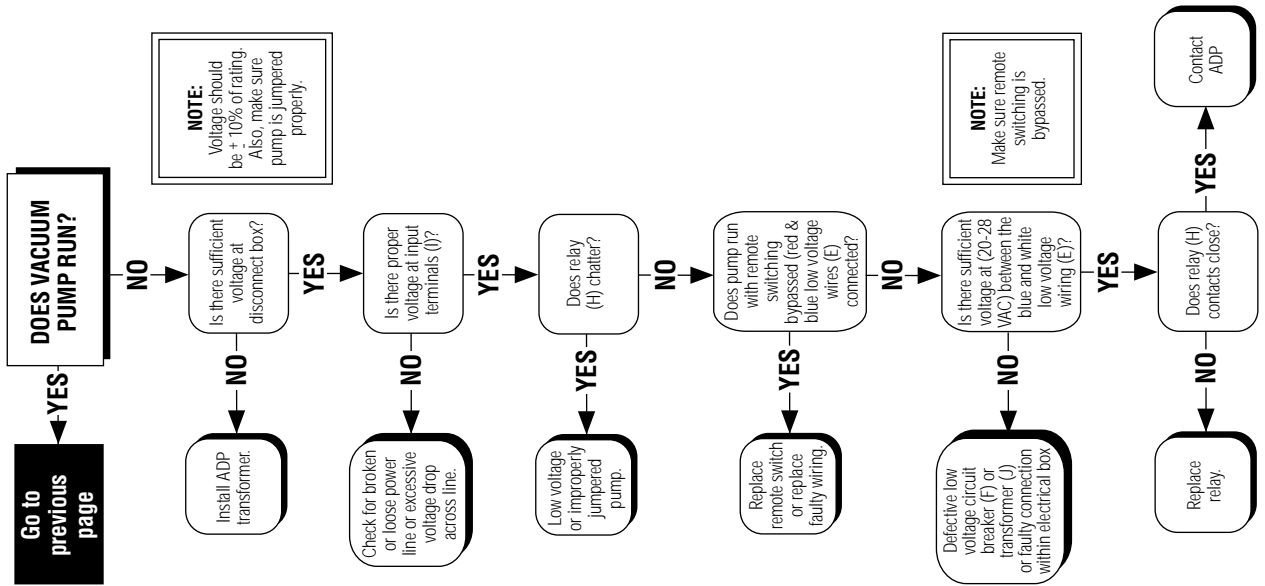
Trouble-Shooting Chart Twin Vacuum



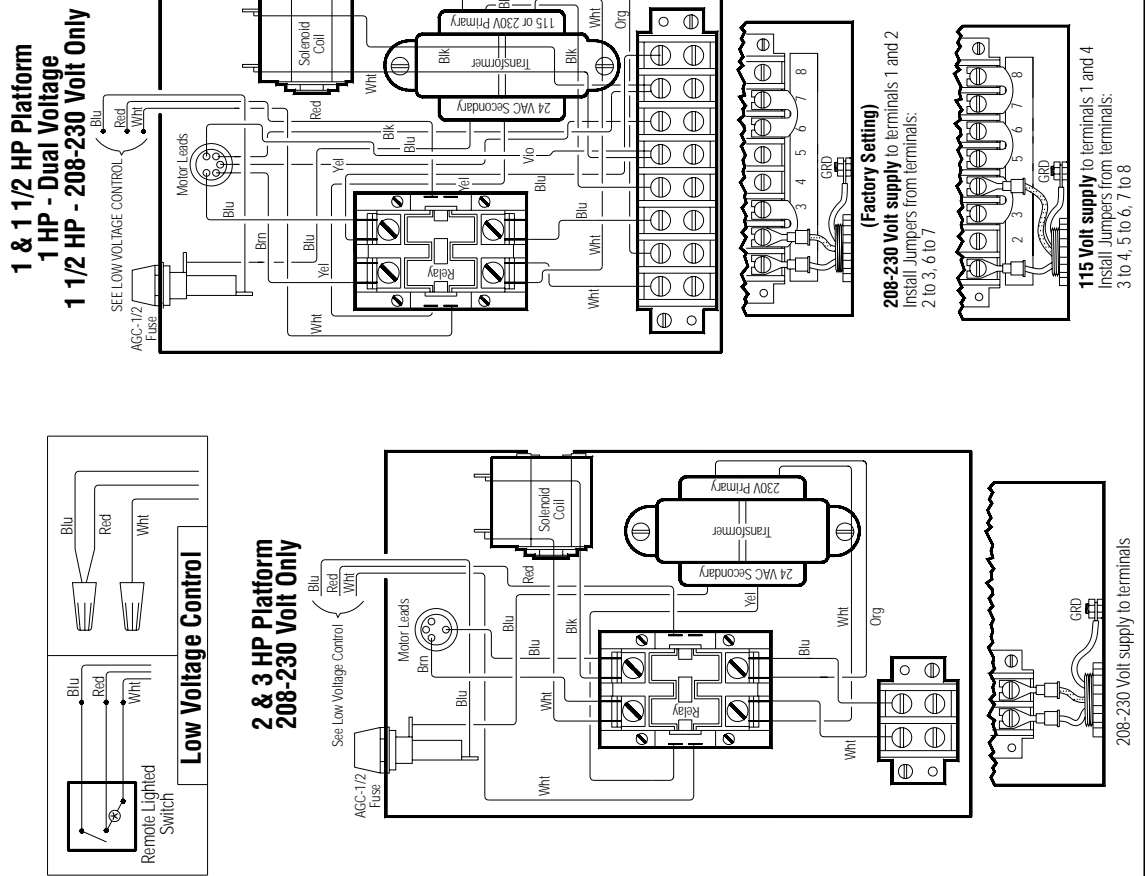
Vacuum Component Diagram



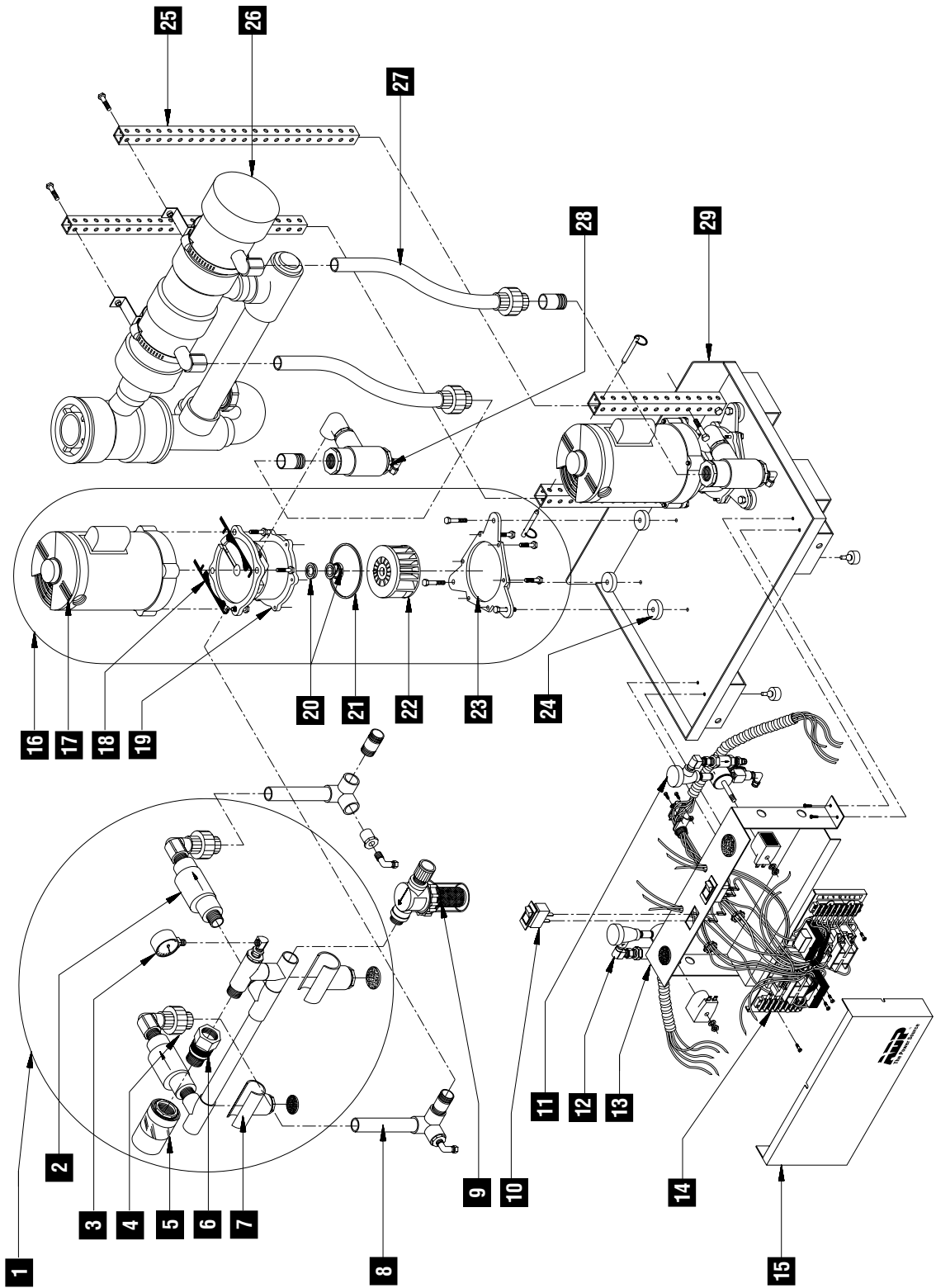
Trouble-Shooting Chart Twin Vacuum



Vacuum Wiring Diagram



Twin Vacuum Model

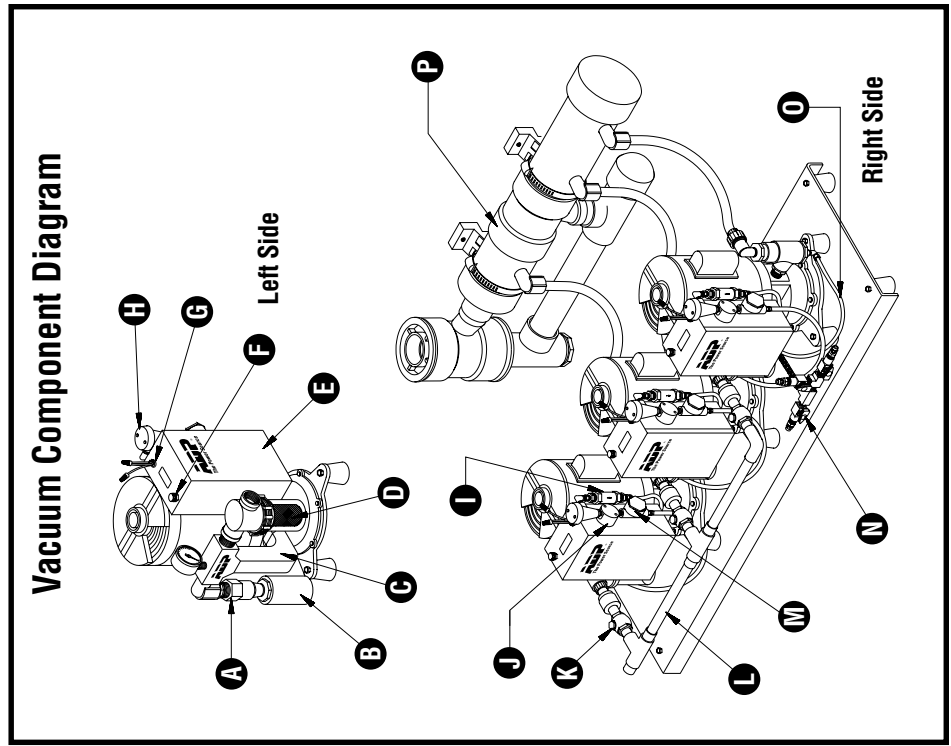
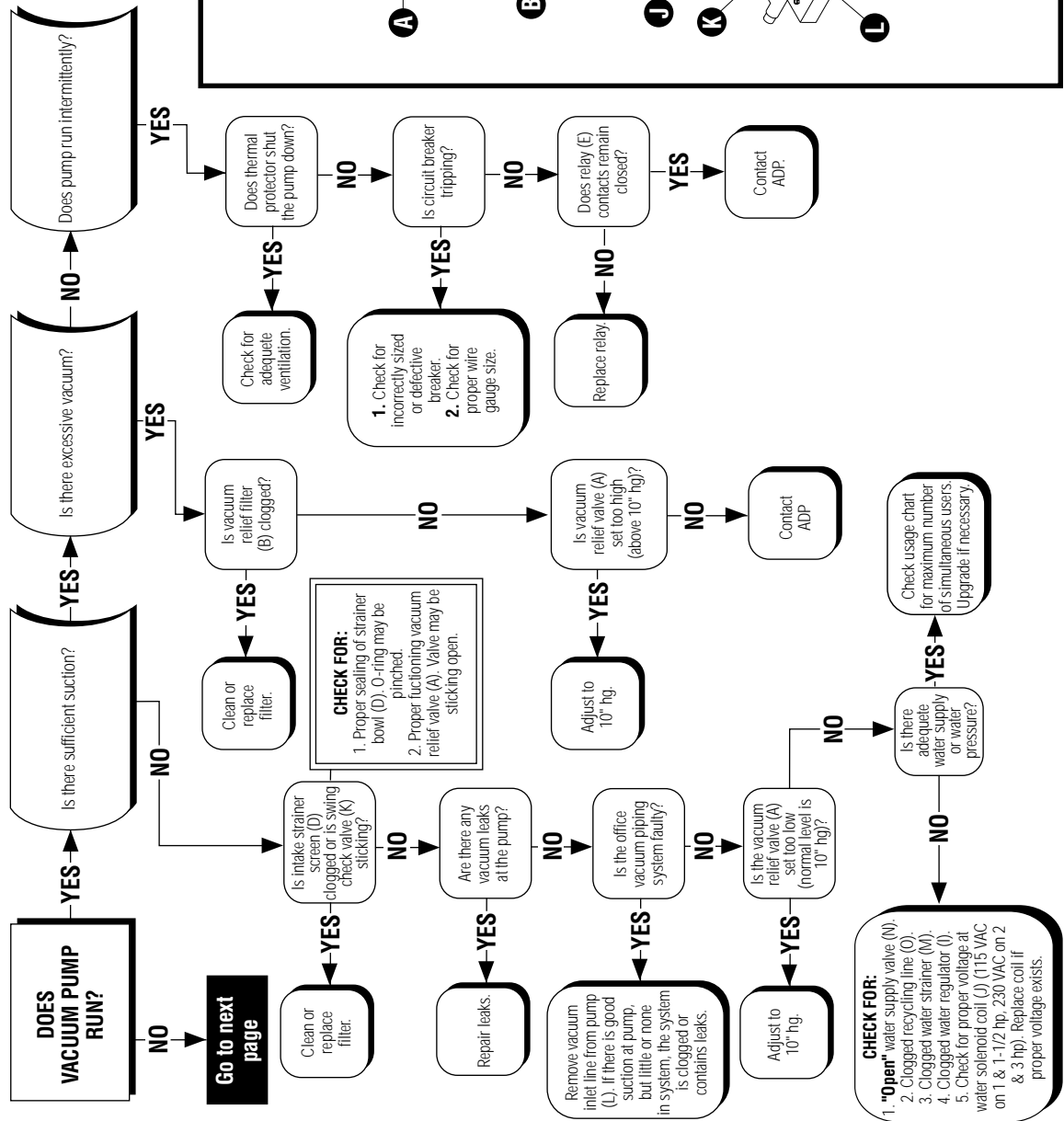


Twin Vacuum Model

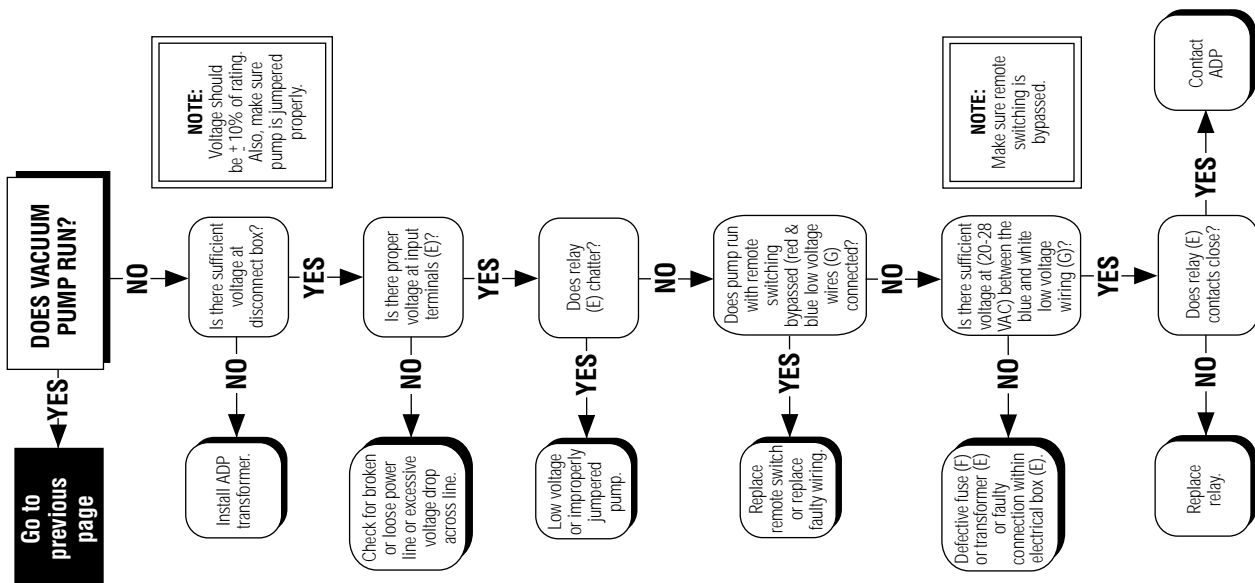
Item	Description	Qty.	AVU10TNR	AVU15TNR	AVU20TNR	AVU30TNR	AVG10TNR	AVG15TNR	AVG20TNR	AVG30TNR	AVB10TNR	AVB15TNR	AVB20TNR
1	Assembly, Intake Manifold Complete	1	SVA95755	SVA95755	SVA95750	SVA95750	SVA95755	SVA95755	SVA95750	SVA95750	SVA95755	SVA95755	SVA95755
2	Twin Vac Check Valve Assembly	2	SVA95700	SVA95700	SVA95700	SVA95700	SVA95700	SVA95700	SVA95700	SVA95700	SVA95700	SVA95700	SVA95700
3	Gauge, 1-30 hg	1	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415
4	Union, PVC 3/4" Slip	2	PVC50200	PVC50200	PVC50200	PVC50200	PVC50200	PVC50200	PVC50200	PVC50200	PVC50200	PVC50200	PVC50200
5	Filter, Vacuum Relief	1	SVA95819	SVA95819	SVA95819	SVA95819	SVA95819	SVA95819	SVA95819	SVA95819	SVA95819	SVA95819	SVA95819
6	Valve, Vacuum Relief	1	PVV85981	PVV85981	PVV85981	PVV85981	PVV85981	PVV85981	PVV85981	PVV85981	PVV85981	PVV85981	PVV85981
7	Kit, New Twin Intake Support	1	AVA85000	AVA85000	AVA85000	AVA85000	AVA85000	AVA85000	AVA85000	AVA85000	AVA85000	AVA85000	AVA85000
8	Kit, Twin Side Outlet Elbow	2	SVA95745	SVA95745	SVA95745	SVA95745	SVA95745	SVA95745	SVA95745	SVA95745	SVA95745	SVA95745	SVA95745
9	Strainer, Complete	1	PVC50706	PVC50706	PVC50708	PVC50708	PVC50706	PVC50706	PVC50708	PVC50708	PVC50706	PVC50706	PVC50706
9a	O-Ring, Strainer Bowl	1	MRP70936	MRP70936	MRP70936	MRP70936	MRP70936	MRP70936	MRP70936	MRP70936	MRP70936	MRP70936	MRP70936
9b	Dispos-A-Bowl	1	AVA60011	AVA60011	AVA60021	AVA60021	AVA60011	AVA60011	AVA60021	AVA60021	AVA60011	AVA60011	AVA60011
10	Switch Circuit Breaker	2	ECS10422	ECS10422	ECS10422	ECS10422	ECS10422	ECS10422	ECS10422	ECS10422	ECS10422	ECS10422	ECS10422
11	Assembly, Water Solenoid (Right)	1	SVA95605	SVA95605	SVA95607	SVA95607	SVA95605	SVA95605	SVA95607	SVA95607	SVA95605	SVA95605	SVA95607
12	Assembly, Water Solenoid (Left)	1	SVA95600	SVA95600	SVA95602	SVA95602	SVA95600	SVA95600	SVA95602	SVA95602	SVA95600	SVA95600	SVA95602
11-12a	Solenoid w/ Coil	2	PVV10470	PVV10470	PVV10472	PVV10472	PVV10470	PVV10470	PVV10472	PVV10472	PVV10470	PVV10470	PVV10472
11-12b	Coil, Solenoid	2	ECO10102	ECO10102	ECO10104	ECO10104	ECO10102	ECO10102	ECO10104	ECO10104	ECO10102	ECO10102	ECO10104
11-12c	Valve, Anti-Siphon	2	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595
11-12d	Valve, Flow Regulator, 19 GPM	2	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505
13	Electrical Box w/Water Solenoids	1	SVA95900	SVA95900	SVA95902	SVA95902	SVA95900	SVA95900	SVA95902	SVA95902	SVA95900	SVA95900	SVA95902
14	Platform, Electrical	2	SVA95832	SVA95832	SVA95833	SVA95833	SVA95832	SVA95832	SVA95833	SVA95833	SVA95832	SVA95832	SVA95833
14a	Block, Terminal	2	ECC10250	ECC10250	ECC10251	ECC10251	ECC10250	ECC10250	ECC10251	ECC10251	ECC10250	ECC10250	ECC10251
14b	Jumper, 2 Terminal	6	ECC10225	ECC10225	---	---	ECC10225	ECC10225	---	---	ECC10225	ECC10225	---
14c	Transformer, 24 V	2	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500
14d	Relay, 24 V	2	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460
15	Cover, Electrical Box	1	ECB80581	ECB80581	ECB80581	ECB80581	ECB80581	ECB80581	ECB80581	ECB80581	ECB80581	ECB80581	ECB80581
16	Pump Cartridge	2	AVA96028	AVA96032	AVA96036	AVA96040	AVA96012	AVA96016	AVA96020	AVA96024	AVA96002	AVA96008	AVA96052
17	Motor, Vacuum	2	HFM30905	HFM30910	HFM30911	HFM30912	HFM30905	HFM30910	HFM30911	HFM30912	HFM30905	HFM30910	HFM30911
18	Housing, Shim, .005 Vacuum	2	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155
19	Housing, Pump	1	CVC80500	CVC80500	CVC80505	CVC80505	CVC80730	CVC80730	CVC80740	CVC80740	CVC80705	CVC80705	CVC80705
20	Assembly, Shaft Seal	2	SVA95845	SVA95845	SVA95847	SVA95847	SVA95845	SVA95845	SVA95847	SVA95847	SVA95845	SVA95845	SVA95847
21	O-Ring, Baseplate	2	MRP70955	MRP70955	MRP70957	MRP70957	MRP70955	MRP70955	MRP70957	MRP70957	MRP70955	MRP70955	MRP70955
22	Impeller	2	CVC80591	CVC80591	CVC80597	CVC80597	CVC80591	CVC80596	CVC80597	CVC80598	CVC80590	CVC80595	CVC80594
23	Baseplate	2	CVC80520	CVC80520	CVC80525	CVC80525	CVC80735	CVC80735	CVC80745	CVC80745	CVC80710	CVC80710	CVC80735
24	Feet Washer, Pump	6	MRP70964	MRP70964	MRP70964	MRP70964	MRP70964	MRP70964	MRP70964	MRP70964	MRP70964	MRP70964	MRP70964
25	Square Tubing, 1" Perforated	2	STK95500	STK95500	STK95500	STK95500	STK95500	STK95500	STK95500	STK95500	STK95500	STK95500	STK95500
26	Assembly, Super Separator	1	AVA95764	AVA95764	AVA95764	AVA95764	AVA95764	AVA95764	AVA95764	AVA95764	AVA95764	AVA95764	AVA95764
27	Hose, PVC Flex 3/4"	4 ft.	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460	PC180460
28	Recycler, Simple Solution	2	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500
29	Mounting Base	1	MBS80540	MBS80540	MBS80540	MBS80540	MBS80540	MBS80540	MBS80540	MBS80540	MBS80540	MBS80540	MBS80540
29a	Feet, Rubber	4	MRP70963	MRP70963	MRP70963	MRP70963	MRP70963	MRP70963	MRP70963	MRP70963	MRP70963	MRP70963	MRP70963
30	Kit, Installation (Not Shown)	1	SVA85210	SVA85210	SVA85215	SVA85215	SVA85210	SVA85210	SVA85215	SVA85215	SVA85210	SVA85210	SVA85210

Trouble-Shooting Chart

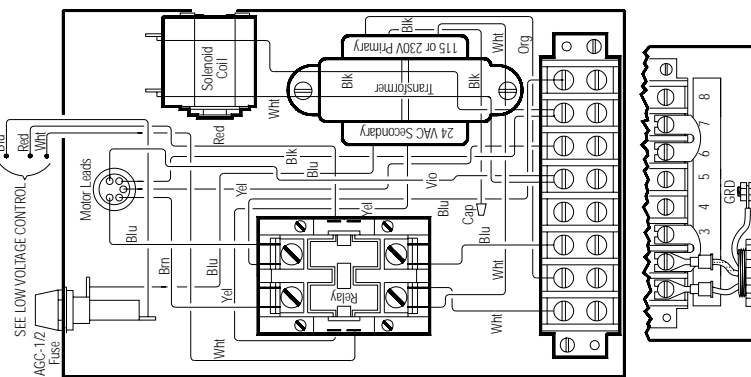
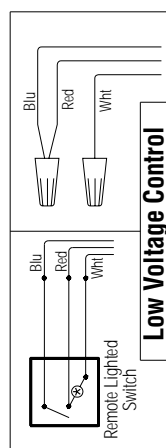
Triple Vacuum



Trouble-Shooting Chart Triple Vacuum

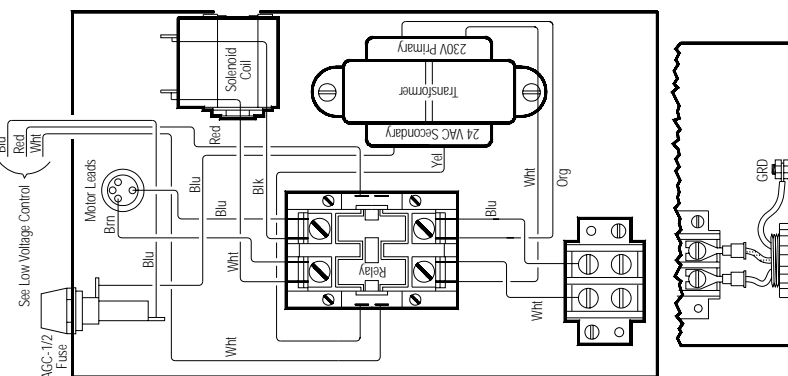


Vacuum Wiring Diagram



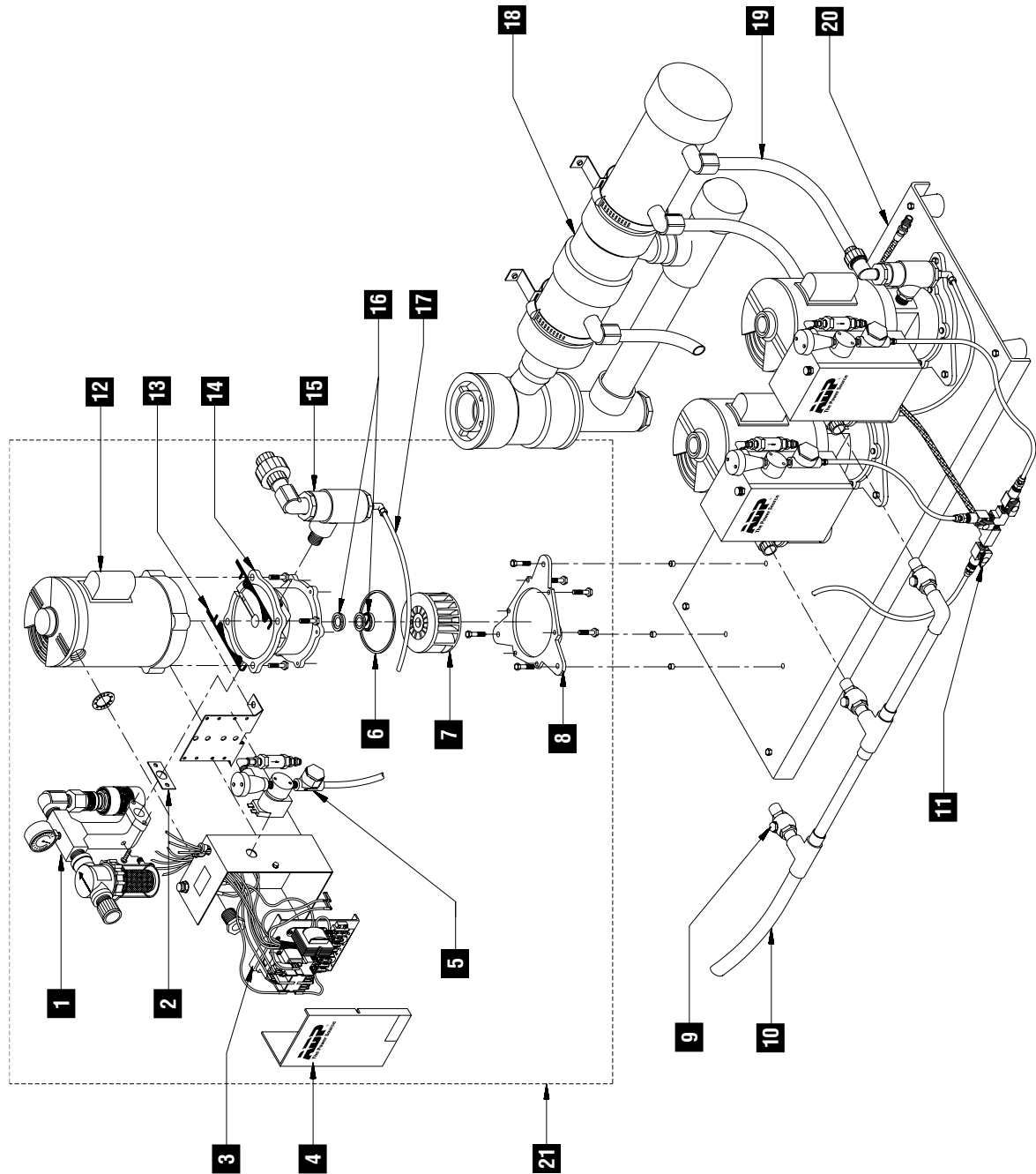
(Factory Setting)

208-230 Volt supply to terminals 1 and 2
Install Jumpers from terminals:
2 to 3, 6 to 7



208-230 Volt supply to terminals

Triple Vacuum Model



Triple Vacuum Model

Item	Description	Qty	AVU10RR	AVU15RR	AVU20RR	AVU30RR	AVG10RR	AVG15RR	AVG20RR	AVG30RR	AVB10RR	AVB15RR	AVB20RR
1	Assembly, Intake Manifold	3	AVP95815	AVP95815	AVP95820	AVP95820	AVP95817	AVP95817	AVP95822	AVP95822	AVP95810	AVP95810	AVP95810
1a	Strainer, Complete	3	PVC50705	PVC50705	PVC50706	PVC50706	PVC50705	PVC50705	PVC50706	PVC50706	PVC50705	PVC50705	PVC50705
1b	O-Ring, Strainer Bowl	3	MRP70935	MRP70935	MRP70936	MRP70936	MRP70935	MRP70935	MRP70936	MRP70936	MRP70935	MRP70935	MRP70935
1c	Dispos-A-Bowl Replacement	3	AVA60001	AVA60001	AVA60011	AVA60011	AVA60001	AVA60001	AVA60011	AVA60011	AVA60001	AVA60001	AVA60001
1d	Gauge, 1-30" Hg	3	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70415	PGA70515	PGA70415	PGA70415	PGA70415
1e	Manifold	3	CVC80535	CVC80335	CVC80535	CVC80535	CVC80750	CVC80750	CVC80750	CVC80750	CVC80725	CVC80725	CVC80725
1f	Valve, Vacuum Relief	3	PVV85980	PVV85980	PVV85981	PVV85981	PVV85980	PVV85980	PVV85981	PVV85981	PVV85980	PVV85980	PVV85980
1g	Filter, Vacuum Relief	3	SVA95818	SVA95818	SVA95819	SVA95819	SVA95818	SVA95818	SVA95819	SVA95819	SVA95818	SVA95818	SVA95818
2	Gasket, Intake	3	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167	MMS71167
3	Assembly, Electrical Platform	3	SVA95830	SVA95830	SVA95835	SVA95835	SVA95830	SVA95830	SVA95835	SVA95835	SVA95830	SVA95830	SVA95835
3a	Block, Terminal	3	ECC10250	ECC10250	ECC10251	ECC10251	ECC10250	ECC10250	ECC10251	ECC10251	ECC10250	ECC10250	ECC10251
3b	Jumper, 2 Terminal	3	ECC10225	ECC10225	---	---	ECC10225	ECC10225	---	---	ECC10225	ECC10225	---
3c	Holder, Fuse	3	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935	EMS10935
3d	Fuse, 1/2 Amp	3	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930	EMS10930
3e	Transformer, 24 V	3	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500	ETR10500
3f	Relay, 24 V	3	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460	ETR10460
4	Cover, Electrical Box	3	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561	ECB80561
5	Assembly, Water Solenoid	3	SVA95821	SVA95821	SVA95820	SVA95820	SVA95821	SVA95821	SVA95820	SVA95820	SVA95821	SVA95821	SVA95820
5a	Strainer, 1/4"	3	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960	PCB50960
5b	Solenoid, 1/4" (w/Coil)	3	PVV10470	PVV10470	PVV10472	PVV10472	PVV10470	PVV10470	PVV10472	PVV10472	PVV10470	PVV10470	PVV10472
5c	Coil, Solenoid	3	ECO10102	ECO10102	ECO10104	ECO10104	ECO10102	ECO10102	ECO10104	ECO10104	ECO10102	ECO10102	ECO10104
5d	Valve, Anti-Siphon	3	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595	PVV50595
5e	Valve, Flow Regulator .19 GPM	3	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505	PVV50505
6	O-Ring, Baseplate	3	MRP70955	MRP70955	MRP70957	MRP70957	MRP70955	MRP70955	MRP70957	MRP70957	MRP70955	MRP70955	MRP70955
7	Impeller	3	CVC80591	CVC80596	CVC80597	CVC80598	CVC80591	CVC80596	CVC80597	CVC80598	CVC80590	CVC80595	CVC80594
8	Baseplate	3	CVC80520	CVC80520	CVC80525	CVC80525	CVC80735	CVC80735	CVC80745	CVC80745	CVC80710	CVC80710	CVC80735
9	Valve, Check (Brass)	3	PVV50657	PVV50657	PVV50658	PVV50658	PVV50657	PVV50657	PVV50658	PVV50658	PVV50657	PVV50657	PVV50657
10	Hose, PVC Flex Intake 4 ft.	4 ft.	PCT80462	PCT80462	PCT80463	PCT80463	PCT80462	PCT80462	PCT80463	PCT80463	PCT80462	PCT80462	PCT80462
11	Assembly, Water Manifold	1	SVA95768	SVA95768	SVA95768	SVA95768	SVA95768	SVA95768	SVA95768	SVA95768	SVA95768	SVA95768	SVA95768
11a	Hose, 1/4" X8' Water	1	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100	SPA97100
11b	Valve, 1/4"	3	PVV50545	PVV50545	PVV50545	PVV50545	PVV50545	PVV50545	PVV50545	PVV50545	PVV50545	PVV50545	PVV50545
12	Motor, Vacuum	3	HFM30905	HFM30910	HFM30911	HFM30912	HFM30905	HFM30910	HFM30911	HFM30912	HFM30905	HFM30910	HFM30911
13	Housing, Shim .005" Vacuum	12	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155	MMS71155
14	Housing, Pump	3	CVC80500	CVC80500	CVC80505	CVC80505	CVC80730	CVC80730	CVC80740	CVC80740	CVC80705	CVC80705	CVC80705
15	Recycler, Simple Solution™	3	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500	SVA95500
16	Assembly, Shaft Seal	3	SVA95845	SVA95845	SVA95847	SVA95847	SVA95845	SVA95845	SVA95847	SVA95847	SVA95845	SVA95845	SVA95847
17	Tubing, PolyFlo 1/4"	4.5 ft.	PCT80610	PCT80610	PCT80610	PCT80610	PCT80610	PCT80610	PCT80610	PCT80610	PCT80610	PCT80610	PCT80610
18	Assembly, Super Separator™	1	AVA95765	AVA95765	AVA95765	AVA95765	AVA95765	AVA95765	AVA95765	AVA95765	AVA95765	AVA95765	AVA95765
19	Hose, PCV Flex 3/4"	12 ft.	PCT80460	PCT80460	PCT80460	PCT80460	PCT80460	PCT80460	PCT80460	PCT80460	PCT80460	PCT80460	PCT80460
20	Plate, Mount	1	MBS80546	MBS80546	MBS80546	MBS80546	MBS80546	MBS80546	MBS80546	MBS80546	MBS80546	MBS80546	MBS80546
20a	Feet, Rubber	4	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910	SVA95910
21	Replacement Pump Assembly	3	AVA95910	AVA95909	AVA95911	AVA95916	AVA95950	AVA95956	AVA95962	AVA95968	AVA95901	AVA95903	AVA96050
22	Kit, Installation	1	SVA85164	SVA85164	SVA85201	SVA85201	SVA85164	SVA85164	SVA85201	SVA85201	SVA85164	SVA85164	SVA85164

Glossary of Terms

Air	A mixture of gasses in Earth's atmosphere used to sustain life. Note: In dental work, restorative cosmetic bonding air may be considered ULTRA-Dry if its dew point is less than minus 20 degrees Fahrenheit.
Amperage	An electrical term used to describe a unit of current, the ampere.
Barometric Pressure	The absolute atmospheric pressure existing at the surface of the Earth.
CFM	A volume flow measurement in units of cubic feet per minute. *SCFM = Cubic Feet Per Minute at standard conditions
Capacity	A measured volume flow rate used to describe air delivered at conditions of pressure, temperature and existing moisture content in units of CFM.
Check Valve	A device that permits flow in one direction only.
Compressor	A mechanical device used to deliver compressed air above atmospheric pressure (0 PSIG).
Dead-End Pressure	The suction pressure attained by a vacuum pump at zero capacity with the suction absolutely blanked off. Measured in inches of Mercury (HG).
Decibel	A measure of pressure waves used to describe sound pressure or noise level or db-A.
db-A	The decibel level measured on the "A" weighing scale at 1 meter in height and meter in distance from the sound source.
Desiccant	A medium used to extract moisture from air.
Dew Point	The temperature at which the vapor (moisture) in air will begin to condense (form dew).
Discharge Pressure	The total pressure measured at the discharge (outlet of the compressor). The pressure is commonly expressed in pounds per square inch (PSI). Note: Pressure may be expressed in gauge or absolute pressure. PSIG plus atmospheric equals PSIA.
Dryer	A device used to remove moisture from the air. Common types of air dryers include desiccant and refrigerant.
FDA	The United States Food and Drug Administration governing medical device manufacturing procedures.
Filter	A device for separating and removing dust and dirt from air or water. Note: A Coalescing filter is an ultra fine mechanical device used to remove harmful dusts, fumes, mists, smog, smoke, and aerosols from the air.

Glossary of Terms

Free Air	Free air is defined as air at atmospheric conditions at any specific location. Because the altitude, barometer, and temperature may vary at different localities and at different times, it follows that this term does not mean air under identical or standard conditions.
Gasket	A device used to provide a seal between two mating surfaces usually made of a soft pliable material.
Grain	A unit of measure of moisture in air. One grain is equal to 1/7000 pound.
Horsepower	A unit of work (See Work). One horsepower is the amount of work required to raise 550 pounds a distance of one foot in one seconds time.
Humidity	In normal terms, humidity has to do with moisture (water vapor) in the atmosphere. Relative humidity (RH) is the ratio of the actual partial vapor pressure in an air-vapor mixture to the saturated vapor pressure at the existing dry-bulb temperature, usually expressed in percentage.
Impeller	The dynamic rotating element of the liquid ring vacuum pump which imparts energy to the flowing medium by means of centrifugal force. It consists of a number of blades mounted so as to move with the motor shaft.
Inches of Mercury	A unit of measure (In-Hg) used to describe vacuum, a pressure below atmospheric and defined as a column of mercury of a specified height having a weight proportional to its height and exerting a force to a unit area.
Inches of Water	13.6 inches of water equals one inch of mercury (See Inches of Mercury above).
Inlet Pressure	The total pressure (static plus velocity) at the inlet of the compressor or vacuum pump. Measured in C.F.M.
KVA	An electrical term used to define transformer ratings of Kilo-Volt-Amperes (Thousands of Volt Amperes).
Liquid Piston-Ring	A rotary vacuum pump in which a veined rotor or impeller revolves in an elliptical casing, with the impeller spaces sealed by a ring of liquid (water) rotating with it inside the casing.
Micron	A unit measure of extremely small particle size, 1 micron = .0004 inches.
N.F.P.A.	National Fire Protection Association. A nonprofit membership organization dedicated to promoting safety from fire, electricity, and related hazards through research, codes and standards, technical advisory services, and public education.
NPT	Abbreviation of the term used to define pipe size of National Pipe Thread.

Glossary of Terms

Oil	A refined petroleum product used in the cooling and lubrication of reciprocating air compressors.
Piston	The reciprocating component of the air compressor which is guided and retained in a compression cylinder.
Pressure	Pressure is a force per unit area usually expressed in psi (pounds per square inch) for compressors or In-Hg (inches of Mercury) for vacuums.
Reciprocating Compressor	A mechanical device used to compress air in which the reciprocating component is a piston having a reciprocating motion in a cylinder.
Saturation	Occurs when the vapor in air is at the dew point or saturation temperature, (See Dew Point).
Seal	A device used between rotating and stationary parts to separate, and minimize leakage between areas of unequal pressure.
Shaft	The part of the rotating element on which the rotating parts are mounted and by means of which energy is transmitted.
Storage Tank	An air tank or receiver used to store air under pressure.
SCFM	Air compressor volume flow rate measured in Cubic Feet per Minute at Standard Conditions of 14.7 PSIA and 60 degrees Fahrenheit.
Tandem Compressor	Two individual air compressors connected to a common discharge line usually wired to start-run-stop simultaneously.
Temperature	A measure of heat or cold (absence of heat) usually expressed in degrees Fahrenheit or degrees Celsius or Centigrade.
Transformer	An electrical device used to increase (boost) or decrease (buck) voltage usually rated in KVA, (See KVA).
U.L.	The Underwriters Laboratories Incorporated, an independent laboratory testing for public safety.
Vacuum	Vacuum is a type of pressure state when air pressure is below atmospheric, usually measured in In-Hg (Inches of Mercury), or In-H ₂ O (Inches of Water).
Valve	A device that regulates the flow of air or water.
Voltage	An electrical term used to describe an electromotive force expressed in volts.
Work	Work is energy in transition (Energy equals a unit of time). Work can't be done unless there is movement.

Notes:

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Notes:

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DENTAL SYSTEM PACKAGES



DENTAL VACUUM PACKAGES



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